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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/766,246	NIELSEN ET AL.	
	Examiner	Art Unit	
	HIEU T. HOANG	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 09 June 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-37 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-37 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/09/2008 has been entered.

2. Claims 1-37 are pending.

Response to Amendment

3. The 35 U.S.C. 112 rejection of claims 32-34 has been withdrawn due to the amendment.

Response to Arguments

4. Applicant's arguments have been fully considered but found moot in view of new ground(s) of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 5 is rejected under 35 U.S.C. 112, first and second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, and as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim discloses "the first remote system to generate a response" and the first remote system to have its response received by the client". First, the client is vague and indefinite. Second, the examiner cannot find any disclosure in the specification regarding this claimed subject matter.

8. It is suggested that applicant could overcome the U.S.C. 112 first paragraph rejection by providing a suitably detailed system diagram (with appropriate cross-indexing in the detailed description to reference numerals on said system diagrams.) No new matter should be added.

9. Claims 1-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 1 recites "the indication" on line 4. This element lacks antecedent basis, therefore rendering the claim indefinite.

11. Claim 1 recites “the indication specifies at least one resource requirement that is desired.” It is vague what is meant by “that is desired.” Why is the resource requirement desired (to do what)?

12. Claim 1 recites “performing the task responsive to the indication” on line 7. It is clearer to write “performing the task responsive to receiving the indication” since an action should follow another action.

13. Claim 1 recites “at least of one of the remote systems.” This should be rewritten to conform to English language and cure antecedent basis error since it seems that the at least one of the remote systems refer back to the one or more remote systems.

14. Claim 1 recites “the first remote system to respond” on line 10. This limitation lacks antecedence basis. It is vague whether the first remote system. It is vague whether “to respond” has anything to do with “the responses” or “the indication” previously recited. The claim is rejected for omitting essential steps between second and third limitations.

15. Claims 2-9 should be amended accordingly to fix the errors in claim 1 shown above.

16. The above errors are merely examples of numerous similar errors in the claims. Applicant is respectfully requested to find and fix these errors.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. Claims 1, 3-7, 9-15, 17-19, 28, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet (US 6,192,388), in view of Bantz et al. (US 2002/0169606, hereafter Bantz), further in view of what has been known in the art (Official Notice or ON)

19. For claim 1, Cajolet discloses a method, comprising:

indicating to one or more remote systems in a distributed data processing system that a task, in a task list, is available for processing based on a distribution list (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 9 lines 63-64, fig. 7 item 136, list of assistant computers, col. 3 lines 17-21, task portion queue or list); wherein the indication specifies at least one resource requirement that is desired (col. 8 lines 24-36, a job servicing request has indication of software required to do the job)

receiving at least one response from the one or more remote systems capable of performing the task responsive to the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); wherein the at least one response is based on a determination by at least one of the remote systems that the at least one resource requirement is satisfied (col. 8 lines

24-36, checking whether the computer that received the request can satisfy the request's requirement such as software needed)

assigning the task from the task list to a remote system of the one or more remote systems to respond based on a selection (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing, col. 8 lines 43-53, dispatcher receiving responses from assisting computers and selecting one to assign the task to)

Cajolet does not explicitly disclose the selection is selecting a first remote system from a queue of the one or more remote systems.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation, in a queue as known in the art, to assign the next call to)

Cajolet-Bantz does not disclose the task is a compilation task.

However, Official Notice is taken that distributing compilation tasks is known at the time of the invention (see e.g., Sundararajan et al., US 6,487,577, abstract).

Also Official Notice is taken that queuing techniques such as First In First Out (FIFO) is known in the art, meaning assigning tasks in a first in first out manner such that first arrival response will be assigned task to is well known.

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet, Bantz and what has been known in the art to assign compilation tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

20. For claim 3, Cajolet-Bantz-ON further discloses indicating to the one or more remote systems comprises indicating a threshold criterion that the one or more remote systems should satisfy, and wherein receiving the at least one response comprises receiving the at least one response from the one or more remote systems that satisfy the threshold criterion (Cajolet, fig. 8, col. 11 lines 11-60, thresholds that assistant processing computers have to pass in order to satisfy the requirement of the tasks).

21. For claim 4, Cajolet-Bantz-ON further discloses indicating the threshold criterion comprises indicating at least one of a preselected processing speed, memory size, and network speed that is desired for the one or more remote systems (Cajolet, fig. 8, col. 11 lines 11-60).

22. For claim 5, Cajolet-Bantz-ON further discloses receiving the at least one response comprises receiving configuration information associated with the one or more remote systems (Cajolet, col. 8 lines 38-40, sending configuration to task dispatcher); and wherein the first remote system to respond refers to at least one of the first remote system to generate a response and the first remote system to have its response received by the client (Cajolet, col. 8 lines 43-52, responses received from remote systems at a problem dispatcher, Bantz, [0021], selection of the first available system to assign task to)

23. For claim 6, Cajolet-Bantz-ON further discloses receiving the configuration information comprises receiving information including at least one of a processing speed, memory size, network speed, and load level associated with the one or more remote systems (Cajolet, fig. 8, col. 11 lines 11-60).

24. For claim 7, Cajolet-Bantz-ON further discloses allowing at least one of the remote systems to perform the task comprises allowing at least one of the remote systems to perform the task based on a selection scheme (Cajolet, col. 8 lines 43-53, selection of assistant computers), wherein the selection scheme comprises at least one of allowing a remote system that responds first to perform the task (Bantz, select a first available call taker workstation to process the next call) and allowing a remote system to perform the compilation task based on the received configuration information (Cajolet, col. 8 lines 39-53, selection of assistant computer based on its configuration).

25. For claim 9, Cajolet-Bantz-ON further discloses the act of indicating comprises indicating that the compilation task is available for processing (Cajolet, fig. 6 steps 100-102, receive request for processing of an available task), and wherein the act of receiving comprises receiving the at least one response from a remote system that has reserved at least a portion of its resources for performing the task (Cajolet, fig. 8 available resources at the assistant computers).

26. For claim 10, Cajolet discloses an article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to:

indicate to a plurality of remote systems in a distributed data processing system that a task in a task list is available for processing based on a list identifying the remote systems (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 9 lines 63-64, list of assistant computers, col. 3 lines 17-21, task portion queue or list); wherein the indication specifies at least one resource requirement that is desired (col. 8 lines 24-36, a job servicing request has indication of software required to do the job)

assign the task from the task list to a remote system of the one or more remote systems to respond based on a selection (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing; col. 8 lines 43-53, dispatcher receiving responses from assisting computers and selecting one to assign the task to); assigning based on a determination by at least one of the remote systems that the at least one resource requirement is satisfied (col. 8 lines 24-36, checking whether the computer that received the request can satisfy the request's requirement such as software needed)

Cajolet does not explicitly disclose the selection is selecting a first remote system from a queue of the one or more remote systems.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation, in a queue as known in the art, to assign the next call to)

Cajolet-Bantz does not disclose the task is a compilation task.

However, Official Notice is taken that distributing compilation tasks is known at the time of the invention (see e.g., Sundararajan et al., US 6,487,577, abstract). Also Official Notice is taken that queuing techniques such as First In First Out (FIFO) is known in the art.

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet, Bantz and what has been known in the art to assign compilation tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

27. For claim 11, Cajolet-Bantz-ON further discloses the task is a compilation task (Cajolet, col. 9 lines 6-9, a rendering task composing of many task portions) and wherein the instructions when executed enable the processor to allow at least one of the plurality of remote systems based on a selection scheme (Cajolet, col. 8 lines 43-53).

28. For claim 12, Cajolet-Bantz-ON further discloses the instructions when executed enable the processor to allow that remote system which responds first to perform the task (Bantz, [0021] lines 1-7, select a first available call taker workstation to process the next call).

29. For claim 13, Cajolet-Bantz-ON further discloses the instructions when executed enable the processor to allow the remote system having at least one of a higher processing speed among the plurality of responding remote systems to perform the task (Cajolet, fig. 7 steps 130, 132) and a desirable performance characteristic, wherein the performance characteristic is determined based on past performance (Cajolet, col. 11 lines 20-60, past performance).

30. For claim 14, Cajolet-Bantz-ON further discloses the instructions when executed enable the processor to allow a plurality of remote systems to perform the task in response to determining that a number of responding remote systems exceed a number of available tasks (Cajolet, col. 9 lines 5-15, a plurality of assistant computers to process portions of a same task).

31. For claim 15, Cajolet-Bantz-ON further discloses the instructions when executed enable the processor to receive responses from at least one of the plurality of the remote systems, wherein the response includes configuration information associated with the one or more remote systems (Cajolet, col. 8 lines 38-42, responses with computer characteristics).

32. For claim 17, Cajolet-Bantz-ON further discloses the instructions when executed enable the processor to receive results from the at least one remote system that is

allowed to perform the task (Cajolet, fig. 5, send render task and receive finished render task).

33. For claim 18, Cajolet discloses an apparatus, comprising:

means for indicating to one or more remote systems in a distributed data processing system that a task in a task list is available for processing based on a distribution list identifying the one or more remote systems (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 9 lines 63-64, list of assistant computers, col. 3 lines 17-21, task portion queue or list); and wherein the means for indicating specifies at least one resource requirement that is desired (col. 8 lines 24-36, a job servicing request has indication of software required to do the job)

means for receiving at least one response from the one or more remote systems capable of performing the task based on the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); wherein the at least one response is based on a determination by at least one of the remote systems that the at least one resource requirement is satisfied (col. 8 lines 24-36, checking whether the computer that received the request can satisfy the request's requirement such as software needed); and

means for assigning the task from the task list to a remote system of the one or more remote systems to respond based on a selection (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task

processing; col. 8 lines 43-53, dispatcher receiving responses from assisting computers and selecting one to assign the task to)

Cajolet does not explicitly disclose the selection is selecting a first remote system from a queue of the one or more remote systems.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation, in a queue as known in the art, to assign the next call to)

Cajolet-Bantz does not disclose a distributed data processing compilation system.

However, Official Notice is taken that distributing compilation tasks is known at the time of the invention (see e.g., Sundararajan et al., US 6,487,577, abstract). Also Official Notice is taken that queuing techniques such as First In First Out (FIFO) is known in the art.

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet, Bantz and what has been known in the art to assign compilation tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

34. For claim 19, Cajolet discloses an apparatus, comprising:
an interface adapted to communicate with one or more remote systems; and
a control unit communicatively coupled to the interface, the control unit adapted to:

indicate to the one or more remote systems in a distributed data processing system that a task in a task list is available for processing based on a distribution list identifying the one or more remote systems (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 9 lines 63-64, list of assistant computers, col. 3 lines 17-21, task portion queue or list); and wherein the indication specifies at least one resource requirement that is desired (col. 8 lines 24-36, a job servicing request has indication of software required to do the job)

receive at least one response from the one or more remote systems capable of performing the task based on the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); wherein the at least one response is based on a determination by at least one of the remote systems that the at least one resource requirement is satisfied (col. 8 lines 24-36, checking whether the computer that received the request can satisfy the request's requirement such as software needed); and

assign the task from the task list to a remote system of the one or more remote systems to respond based on a selection (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing; col. 8 lines 43-53, dispatcher receiving responses from assisting computers and selecting one to assign the task to)

Cajolet does not explicitly disclose the selection is selecting a first remote system from a queue of the one or more remote systems.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation, in a queue as known in the art, to assign the next call to)

Cajolet-Bantz does not disclose a distributed data processing compilation system.

However, Official Notice is taken that distributing compilation tasks is known at the time of the invention (see e.g., Sundararajan et al., US 6,487,577, abstract)

Also Official Notice is taken that queuing techniques such as First In First Out (FIFO) is known in the art.

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet, Bantz and what has been known in the art to assign compilation tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

35. For claim 28, Cajolet-Bantz-ON further discloses the control unit is adapted to identify the task that is available for processing in a queue that is accessible by one or more of the remote systems (Cajolet, fig. 7 steps 146-148, continuing to new task portion in a queue).

36. For claim 29, the claim is rejected for the same rationale as in claim 19.

37. For claim 31, Cajolet-Bantz-ON further discloses at least one of the remote systems is adapted to: detect an indication from the client system that a compilation

task is available for processing (Cajolet, fig. 6 step 100, assisting computers receive request for assistance on task processing); determine if the at least one remote system is capable of processing the compilation task (Cajolet, fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); and process the compilation task for the client system in response to determining that at least one remote system is capable of processing the compilation task (Cajolet, fig. 6 steps 110-112, assisting computers participate in distributed task processing).

38. Claims 35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet in view of Bantz.

39. For claim 35, Cajolet discloses a method, comprising:

indicating to one or more remote systems in a distributed data processing system that a task in a task list is available for processing (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 3 lines 17-21, task portion queue or list); and wherein the indication specifies at least one resource requirement that is desired (col. 8 lines 24-36, a job servicing request has indication of software required to do the job)

receiving at least one response from the one or more remote systems capable of performing the task responsive to the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); wherein the at least one response is based on a determination by at least one of the

remote systems that the at least one resource requirement is satisfied (col. 8 lines 24-36, checking whether the computer that received the request can satisfy the request's requirement such as software needed); and

assigning the task from the task list to a remote system of the one or more remote systems to respond based on a selection (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing; col. 8 lines 43-53, dispatcher receiving responses from assisting computers and selecting one to assign the task to)

Cajolet does not explicitly disclose the selection is selecting a first remote system from a queue of the one or more remote systems.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation, in a queue as known in the art, to assign the next call to)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet, Bantz to assign tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

40. For claim 37, Cajolet-Bantz further discloses the task is at least one of a compilation task, a video processing task, audio processing task, image processing task, encryption task, and decryption task (Cajolet, fig. 5, 3D image rendering task)

41. Claims 16, 30 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet-Bantz, in view of what has been known in the art, and in view of Hinni et al. (US 2007/0011226, hereafter Hinni)

42. For claim 36, Cajolet-Bantz further discloses the distributed system is a distributed system, and wherein indicating comprises indicating to the one or more remote systems that a task is available for processing (fig. 6 step 100, assisting computers receive request for assistance on task processing); wherein the indication was based on a distribution list identifying the one or more remote systems (fig. 7, 136, list of assistants), and further wherein receiving the at least one response comprises receiving the at least one response from the one or more remote systems capable of performing the task responsive to the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done)

Cajolet-Bantz does not disclose a distributed compilation system with compilation tasks.

However, Official Notice is taken that distributing compilation tasks is known at the time of the invention (see e.g., Sundararajan et al., US 6,487,577, abstract)

Cajolet-Bantz-ON further discloses the client transmitting task request to a plurality remote computers (Cajolet, fig. 7 steps 123, 126). Cajolet-Bantz-ON does not explicitly disclose the request from the client system was a multicast request.

However, Hinni discloses the same ([0079] lines 3-5, multicast task request to multiple task handlers)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet-Bantz and ON and Hinni to multicast task request to a plurality of computers since multicasting is an efficient method of transmitting same information to multiple receivers (as compared to, e.g., unicasting).

43. Claims 16 and 30 are rejected for the same rationale as in claim 36.

44. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet-Bantz-ON as applied to claim 1 above, and further in view of Harper et al. (US 2002/0087612, hereafter Harper).

45. For claim 2, Cajolet-Bantz-ON further discloses the distribution list comprises destination addresses associated with the one or more remote systems (col. 9 lines 63-64, list of assistant computers, obviously containing their addresses), wherein Cajolet-Bantz-ON does not explicitly disclose:

providing a message to a router that, responsive to the message, transmits at least a portion of the message to a plurality of the remote systems based on the distribution list.

However, Harper discloses the same (fig. 2, a gateway connected to a dispatcher for transmitting task advertisements)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet-Harper-ON to dispatch tasks to multiple

servers or assistant computers through a gateway or a router to implement a larger or a WAN distributed system.

46. Claims 8 and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet-Bantz-ON as applied to claim 1 above, and further in view of Harper and Hinni.

47. For claim 8, Cajolet-Bantz-ON does not explicitly disclose wherein indicating to the one or more remote systems comprises providing a message to a router that, responsive to the message, transmits, at least a portion of the message to a plurality of the remote systems based on the distribution list;

However, Harper discloses the same (fig. 2, a gateway connected to a dispatcher for transmitting task advertisements)

Cajolet-Bantz-ON-Harper does not disclose wherein the distribution list is a multicast list, and transmitting is via multicast.

However, Hinni discloses the same ([0079] lines 3-5, multicast task request to multiple task handlers)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet-Bantz-ON, Harper and Hinni to multicast task request to a plurality of computers since multicasting is an efficient method of transmitting same information to multiple receivers (as compared to, e.g., unicasting).

48. Claim 20 is rejected for the same rationale as in claim 8.

49. For claim 21, Cajolet-Bantz-ON-Harper-Hinni further discloses the control unit is adapted to indicate a threshold criterion that the one or more remote systems should satisfy and further adapted to receive the at least one response from the one or more remote systems that satisfy the threshold criterion (Cajolet, fig. 8, col. 11 lines 11-60, thresholds that assistant processing computers have to pass in order to satisfy the requirement of the tasks).

50. For claim 22, Cajolet-Bantz-ON-Harper-Hinni further discloses the control unit is adapted to indicate at least one of a minimum processing speed, memory amount, and network speed that is desired for the one or more remote systems (Cajolet, fig. 8, col. 11 lines 11-60).

51. For claim 23, Cajolet-Bantz-ON-Harper-Hinni further discloses the control unit is adapted to receive configuration information associated with the one or more remote systems (Cajolet, col. 8 lines 38-40, sending configuration to task dispatcher).

52. For claim 24, Cajolet-Bantz-ON-Harper-Hinni further discloses the control unit is adapted to receive information including at least one of a processing speed, memory size, network speed, and load level associated with the one or more remote systems (Cajolet, fig. 8, col. 11 lines 11-60).

53. For claim 25, Cajolet-Bantz-ON-Harper-Hinni further discloses allowing at least one of the remote systems to perform the task comprises allowing at least one of the remote systems to perform the task based on a selection scheme (Cajolet, col. 8 lines 43-53, selection of assistant computers).

54. For claim 26, Cajolet-Bantz-ON-Harper-Hinni further discloses the instructions when executed enable the processor to allow that remote system which responds first to perform the task (Bantz, [0021] lines 1-7, select a first available call taker workstation to process the next call).

55. For claim 27, Cajolet-Bantz-ON-Harper-Hinni further discloses the selection scheme comprises allowing a remote system to perform the compilation task based on the received configuration information (Cajolet, fig. 6 steps 110-112, assisting computers participate in distributed task processing).

56. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet in view of Jones et al. (US 2002/0007389, hereafter Jones), further in view of what has been known in the art (ON).

57. For claim 32, Cajolet discloses a method, comprising:

detecting an indication from a client system to process one or more tasks (fig. 6 step 100, assisting computers receive request for assistance on task processing);

determining if a remote system that detects the indication is capable of processing at least one of the one or more tasks in response to detecting the indication from the client system (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); and

processing the at least one task for the client system in response to at least one or more of the tasks from the client system being assigned to first remote system (fig. 6 steps 110-112, assisting computers participate in distributed task processing, assigning task to the best computer based on a formula).

Cajolet does not explicitly disclose reserving one or more resources of the remote system in response to determining that the remote system is capable of processing the at least one of the compilation task

However, Jones discloses reserving a resource after determining amount of resource needed for a requested task (abstract, fig. 2, items 34-36)

Cajolet-Jones does not disclose a distributed compilation system with compilation tasks.

However, Official Notice is taken that distributing compilation tasks is known at the time of the invention (see e.g., Sundararajan et al., US 6,487,577, abstract)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Jones and what has been known to reserve resource in response to determining that the remote system is capable of

processing the at least one of the compilation task in order to make the resource of an assisting computer available when needed and therefore make distributed program running on multiple machines exhibit predictable behavior (Jones, abstract).

58. For claim 33, Cajolet-Jones-ON further discloses providing results of the processing to the client system (Cajolet, fig. 5, send render task and receive finished render task).

59. For claim 34, Cajolet-Jones-ON further discloses the processing comprises accessing a queue associated with the client system and determining the compilation task to process (Cajolet, fig. 7 steps 146-148, continuing to new task portion in a queue).

Conclusion

60. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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